

NASA honors minority contract support

Glenn's Carl Silski was one of three recipients of a NASA Exceptional Achievement medal for outstanding advocacy, contributions, and innovative approaches to utilizing minority and women-owned businesses. NASA Administrator Sean O'Keefe presented the awards during the Agency's annual Minority Business and Advocates Award ceremony on September 24.

Silski, who has served as the small business officer in the Procurement Division for the past 5 1/2 years, was lauded for several initiatives and innovations including the improvement of the

Small Disadvantaged Business (SDB) Forums at the Center and for creativity in designing contract set-asides and sub-contracting goals to champion the cause of small, SDB, and women-owned businesses. Mark Stiles and Arthur Goldman, both from Marshall Space Flight Center, were the other medal recipients.

The personal effort and diligence of Silski may have also played a

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Photo by NASA/Renee Bouchard

NASA Administrator Sean O'Keefe presents the Exceptional Achievement award to Carl Silski.

STS-112 expands ISS science and structure

BY S. JENISE VERIS

It was onward and upward for NASA television viewers who got a spectacular view as if hitchhikers aboard the STS-112 *Atlantis* shuttle launch on October 7. A color video camera mounted atop *Atlantis*' external tank enabled viewers to take a virtual ride aboard the shuttle as it reached near-orbital speed, about 56 miles above the Earth.

Cuyahoga County and surrounding area ham radio operators stayed

tuned to all the launch activities compliments of the Glenn Amateur Radio Club, which

made air-to-ground programming available on launch day. For Glenn engineers it was another opportunity to take pride in their contributions to the International Space Station development through the Starboard One (S1) truss and the In-SPACE (Investigating the Structure of Paramagnetic Aggregates of Colloidal Emulsions) glovebox experiment samples that were delivered aboard *Atlantis*.

One of many home improvements designed for the station, the 30,000-pound aluminum S1 truss was attached to the central truss as additional support for radiator panels that are part of the station's central thermal control (cooling) system. These radiators were validated in Glenn's Space Power Facility at Plum Brook Station.

Also housed within the truss are communications systems, attachment points for external experiments, and other subsystems including Glenn-designed electrical power system components—

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Across the Agency

Studies aim to reduce airplane fuel flammability

Glenn Research Center awarded four contracts totaling \$400,000 in support of NASA's Aviation Safety Program to develop technology that will help prevent airliner fuel tank fires and reduce the chance for explosions. Under Phase I of the contract, the four companies—Creare Engineering, Inc., Hanover, NH; Essex Cryogenics, Inc., St. Louis, MO; Honeywell Environmental Controls Systems, Torrance, CA; and Valcor Engineering, Springfield, NJ—will study and perform feasibility of replacing oxygen with a gas that will not support combustion. This research is in response to the National Safety Transportation Safety Board's recommendations, resulting from recent fatalities caused by center wing fuel tank explosions, which are located under the passenger cabin inside the wings. Actual hardware fabrication and testing is the ultimate goal of the program, which would occur during Phase II.

NASA scientist recognized for simulation of submicroscopic parts

"Growing" atomic-scale 3-D computer circuits that may lead to human-like sensory systems is the latest simulation effort of Deepak Srivastava, a senior scientist at NASA Ames. Using NASA supercomputers to simulate molecular carbon nanotubes, so small they cannot be seen with a conventional microscope, is the work for which he recently earned the prestigious Eric Reissner Medal during the International Conference on

Computational Engineering and Sciences. The carbon nanotube is a new form of carbon, only a few atoms wide but extremely strong, that someday could be the major material from which scientists make future artificial brains, as well as tiny machines that may help with tasks as diverse as planetary exploration and curing disease. Additional technical information about Srivastava's carbon nanotube work is on the Web at <http://www.ipt.arc.nasa.gov/srivastava.html>.



NASA honored for e-government security

Headquarters release

The White House recently honored NASA for its successful completion of a program to ensure the security of Federal e-government initiatives at a cross-certification ceremony sponsored by the Federal Public Key Infrastructure Bridge Certification Authority.

By "cross certifying," NASA and three other agencies—the Department of Agriculture's National Finance Center, the Department of the Treasury, and the Department of Defense—will be able to send and receive secure e-mail across organizations. Secure Government-wide information systems, and the secure exchange of information within the Government, are essential elements of homeland security, said Paul Strassmann, NASA's acting chief information officer.

The cross-certification is one part of the Administration's eAuthentication Initiative, which in turn is part of the Electronic Government Initiatives of the President's 2002 Management Agenda. The eAuthentication Initiative provides authentication services to the other 24 initiatives, which are designed to better link the Federal Government to citizens, businesses, and State and local governments, as well as improve the Federal Government's internal efficiency. ♦

NASA names news chief

Headquarters release

Robert Mirelson, former deputy bureau chief for Consumer Affairs with the Federal Communications Commission (FCC), was selected the new chief of News and Information at NASA Headquarters



Mirelson

in Washington. He succeeds Bob Jacobs, who was named Media Services director earlier this summer.

While at the FCC, Mirelson helped develop and implement national media and consumer information and education programs and improved public Internet access to the commission.

Prior to a senior position with Booz Allen & Hamilton, he served in several areas during his 29-year career in the U.S. Army including Pentagon spokesman, commander of the American Forces radio and television network in Korea, publisher of the European edition of the *Stars & Stripes* newspaper, and director of Corporate Communications for the U.S. Army Corps of Engineers in Washington. ♦

NASA explores Hollywood

Jet Propulsion Lab release

NASA presented future adventures and long-range plans for advancing the frontiers of flight, space, and knowledge during the first symposium before a group of Hollywood's most influential filmmakers at the Jet Propulsion Laboratory in September.

Robert Shapiro, nine-time Academy Award-winning coproducer and the creative consultant hired for the symposium, said that he was confident Hollywood will be successful in re-igniting the American people's passion for the exploration of the unknown. ♦

Astronomer wins Nobel Prize for NASA-funded research

Headquarters release

Riccardo Giacconi, the "father of x-ray astronomy," received the Nobel Prize in physics for "pioneering contributions to astrophysics," that have led to the discovery of cosmic x-ray sources.



Giacconi

Giacconi, president of the Associated Universities, Inc., in Washington, and research professor of physics and astronomy at Johns Hopkins University, Baltimore, discovered the first x-ray stars and the x-ray background. He conceived and led implementation of the Uhuru and High Energy Astronomy Observatory-2 (HEAO-2) x-ray observatories, and with funding from NASA, also detected sources of x-rays that most astronomers now consider to contain black holes.

In 1976, Giacconi along with Harvey Tananbaum of the Harvard-Smithsonian Center for Astrophysics in Cambridge, MA, submitted another proposal to NASA initiating the study and design of a large x-ray telescope, which led to work on what was then known as the Advanced X-ray Astrophysics Facility and since renamed the Chandra X-ray Observatory.

Giacconi currently serves as principal investigator for the ultradeep survey with Chandra that has already obtained the deepest x-ray exposures to date with a million-second observation. He was also the first director of the Hubble Space Telescope Science Institute in Baltimore. ♦

Minority contractor awards

Continued from page 1

role in the Center's repeat performance to earn recognition for meeting or exceeding all negotiated socio-economic business goals in fiscal year 2001. Glenn was one of five field centers recognized, along with Dryden, Langley, Ames, and the Jet Propulsion Lab.

Glenn was one of five field centers recognized, along with Dryden, Langley, Ames, and the Jet Propulsion Laboratory.

NASA named QSS Group, Inc., headquartered in Lanham, MD, as its Minority Contractor of the Year. Nominated by both Glenn and Ames, the company was recognized as a prime contractor at Ames for a broad range of research and development provided to its Computational Science Division. This research and development covered areas such as

artificial intelligence, knowledge-based systems, autonomy and robotics, neuroengineering and flight control, automated software engineering, and collaborative and assistant systems. To Glenn, the company provides engineering and scientific support covering all disciplines to ongoing program and projects including basic and specialized research.

The Minority Subcontractor of the Year award went to GB Tech, Inc., of Houston, a strategic partner with the Boeing Company on the International Space Station program for hardware and software quality assurance and software-development integration-laboratory operational support. The Women-Owned Business of the Year award went to Tech Trans International, Inc., also headquartered in Houston. Tech Trans, as a prime contractor at Johnson, supports the U.S.-Russian space programs, providing translation, interpretation, language training, and logistics support services in the United States and Russia. ♦

STS-112 payload

Continued from page 1

dc/dc converter units and another set of remote power control modules that provide grounding and voltage regulation.

Delivery of the InSPACE samples will enable the Expedition 6 crew to begin conducting research using its hardware delivered earlier aboard the STS-111 mission. InSPACE is designed to obtain fundamental data of the complex properties of magnetorheological fluids, a new class of smart materials capable of providing rapid rheological response that can be used to advance such items as brake systems, seat suspensions, robotics, clutches, airplane landing gear, and damper systems. Glenn Microgravity Division engineers Juan Agui and Jack Lekan are the In-SPACE project scientist and project manager, respectively. ♦

NASA commits to developing workforce

Headquarters release

The Education Division, Office of Human Resources and Education at NASA Headquarters, awarded a total of \$3.56 million to 45 consortia in the National Space Grant College and Fellowship Program based on their proposals for aerospace workforce development.

The consortia were selected based on a competitive evaluation of their plans to enlarge and to enhance the "pipeline" or resource pool of higher education graduates and faculty who will become involved with NASA and stay connected as employees, contractors, or principal investigators. Consortia awards ranged from \$20,000 to \$100,000.

The National Space Grant Program, mandated by Congress in 1987, consists of 52 state consortia in the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico. All carry out programs in education, research, and public service. This program will increase the number and diversity of highly qualified individuals knowledgeable of and experienced in NASA's research mission. ♦

CFC 2002 kickoff



C-2002-1863

Photo by Marvin Smith

Glenn employees who gathered for the 2002 Combined Federal Campaign (CFC) Kickoff on September 19 received words of inspiration from distinguished guests that included keynote speaker FOX8 Meteorologist Dick Goddard (pictured above left with George Saad, Glenn's CFC chair). Reading from an essay published in his almanac, Goddard expressed the importance of everyone trying to relieve the pain and suffering of others as much as possible while traveling life's often trying journey. Citing how CFC played an important role in helping those who suffered losses from 9/11, Admiral Ron Silva, commander of the Coast Guard's 9th District and chairman for the Northeast Ohio CFC, commended Glenn on its role in last year's successful campaign. He noted, however, that the need in the Cleveland area is still great, and urged Glenn keyworkers to set out earlier on a faster pace to meet or exceed the Center's goal of \$357,000 for this year's campaign.

Photo by Doreen Zudell



Shoe fund

Glenn's Shoe Fund 2002 contribution to Shoes and Clothes for Kids continues a long tradition of reaching out to needy children in Cuyahoga, Lorain, and adjoining counties. On October 9, Center Director Donald Campbell presented a check for \$1,200 on behalf of Glenn employees to Shoes and Clothes for Kids Executive Director Valerie McCormack (left). A nonprofit organization, Shoes and Clothes for Kids (previously known as Shoes for Kids) provides new shoes, school clothing, and other basic clothing to children from low-income families. Glenn's recent contribution will provide shoes for approximately 120 children.



Photo by Doreen Zudell

Warm reception for cool book



C-2002-1876

Photo by Marvin Smith

One of Cleveland's historic landmarks and a world-premier facility is Glenn's Icing Research Tunnel (IRT). "We Freeze to Please," the slogan for the IRT, is now also the title of a new book, *We Freeze to Please: A History of NASA's Icing Research Tunnel and the Quest for Safety*. The book tells the story of this unique facility that has made unparalleled contributions to a specialized area of aeronautics research. On October 3, the author of the book, Dr. William M. Leary, visited Glenn as the guest of honor at a book signing ceremony. Leary, professor of history at the University of Georgia in Athens, GA, talked about the book's importance and his experiences interviewing

those involved with the IRT. "This is one of the most enjoyable projects of my writing career," Leary shared. "I hope you enjoy the product." Pictured are author Leary (seated) autographing books for Al Dagliesh (left) and William Sexton, retirees from the Icing Research Branch.

Healthy options

Glenn's Safety Office and Medical Services hosted the second annual Health Fair at OAI on September 20. More than 40 exhibitors provided a wide variety of health screening and educational opportunities to approximately 1200 employees who attended. The Lab bus shuttled employees to and from the event where they enjoyed healthy food samples, fitness demonstrations, safety checks, giveaways, and drawings for 35 health-and safety-related prizes. Pictured, left to right, are Bobbi Wells (0160) talking with Melissa Turner and Amanda Strauss, students from the Cuyahoga Valley Career Center Dental Assisting Program.



Director's Corner

With Donald Campbell

Continuing Resolution: a measure to continue our work

The Federal Government's budget calendar runs from October 1 through September 30 of each year. During the fiscal year, all the Federal departments, agencies, and programs are authorized to spend congressionally specified amounts of money. That money cannot

be spent, however, unless it is explicitly appropriated for a given purpose.

Each year, the Congress must pass, and the President must sign, 13 separate Appropriation Bills by October 1 to fund all of the Federal Government's

departments, agencies, and programs the following year. If Congress and the President fail to pass all of the Appropriation Bills, there will be some Government entities that do not have money appropriated to them. Simply stated, there will be no money to spend on some Federal Government functions until the relevant Appropriation Bill is passed and signed.

In most instances, Congress and the President will agree to a Continuing Resolution (CR), which temporarily funds the departments, agencies, and programs for which Appropriation Bills have not been passed. A CR must be passed by both houses of Congress and signed by the President. In general, a CR is intended to fund agencies or programs for a short period of time at the same funding level as the previous year. The main purpose of a CR is to keep the Government operating long enough for Congress and the President to work out an agreement on all 13 Appropriation Bills.

Fiscal year 2003 started with a CR as the Congress had passed none of the Appropriation Bills, including the Housing and Urban Development and Independent Agencies Appropriation that funds NASA. While this situation may present difficulties for us as an Agency, please be assured that we will make every effort to effectively carry out the work of the Center and the mission of the Agency. ♦

News Notes

AFGE MEETING: AFGE Local 2182 will hold its monthly membership meeting at 4:30 p.m. on Wednesday, November 6, at the Clifton

All members are encouraged to attend.

ENTREPRENEURIAL PERSPECTIVES: Glenn's Commercial Technology Office and Enterprise Development, Inc., invites employees to explore their potential to start a company by attending the Entrepreneurial Perspectives series, November 7, 15, and 18. Questions answered in the series include: How do I protect my idea? How do I get funding? How do I use NASA tech transfer resources? To review the topics, speakers, and reservation information, visit <http://cto/eps/eps.asp>.

LESA MEETING: LESA/IFPTE Local 28 will hold its monthly membership meeting on

Wednesday, November 13, at noon in

DISABILITY OBSERVANCE: Glenn's Disability Awareness Month Observance is November 13, from 1 to 3 p.m. in the Ad Bldg. Auditorium. Zoe Koplowitz, award-winning author of *The Winning Spirit—Life Lessons Learned in Last Place* and Nelson Laver, a.k.a. the American Story Teller, are the keynote speakers.

GLENN PRAYER BREAKFAST: Mark your calendar and plan to join the NASA Glenn Prayer Group for the 8th Annual Prayer Breakfast on November 14 from 7:00 to 8:30 a.m. in the Small Dining Room. The guest speaker will be Bob Devine, a former WCRF radio morning show host. For more information, contact Kevin Melcher at kevin.melcher@grc.nasa.gov or 216-433-3743.

Exchange Corner

- *Peterson's holiday nut sale:* Peterson's freshly roasted cashews, pistachios, and mixed nuts will be on sale in the Main Cafeteria on November 13 and 14 from 11 a.m. to 2 p.m.
- *Books Are Fun book fair:* The book fair will be held November 19 to 20 in the upper section of the Main Cafeteria from 9 a.m. to 2 p.m.
- *Annual Thanksgiving dinner special:* Dinner will be served in the Main and DEB Cafeterias on November 21 from 11 a.m. to 2 p.m.

Disability employment Web site

With the goal of recruiting and retaining a diverse, well-qualified workforce focused on results for the American public, President Bush believes the Federal Government must increase employment opportunities for people with disabilities. Toward that effort, the Office of Personnel Management worked closely with agencies with disability employment responsibilities to develop a new Web site, www.opm.gov/disability. NASA Administrator Sean O'Keefe encourages all Agency employees to visit the site and share it with others.

Glenn continues its pursuit of VPP certification

The Glenn Safety Office (GSO) continues to lead the Center in the pursuit of the Ohio Safety Hazard Association Voluntary Protection Program's (VPP) Star Certification, with a target date of FY03.

"To ensure that the Center meets that date, we have commissioned ADSI, Inc., to perform a 'gap' analysis to validate that our efforts over the past 2 years were on track," explained Manuel Dominguez, GSO chief. "However, the task is not yet completed. The ADSI report, as well as the DuPont assessment that was

completed last year, reveal that there are several areas that need attention if Glenn is to meet the VPP requirements."

These include the following items:

1. Increase management implementation and accountability for safety programs.
2. Mandate safety training to ensure that employees understand and participate in issues related to their responsibilities.
3. Include risk management and safety and environmental safeguards as part of the design process in all programs.
4. Improve GSO's efforts to review and upgrade the safety program, get the message out to employees, and respond to questions regarding the VPP process.

The Executive Safety Board has requested that the VPP implementation plan be

updated to ensure that these areas are corrected as soon as possible. A Centerwide team will be commissioned to lead the certification effort.

The primary source for information related to the Center's effort is located on the VPP Web page. It can be accessed at <http://gso.grc.nasa.gov/vpp/default.asp>.

"We encourage all employees to review the Web page and provide feedback," Dominguez urged. "Now is the time to fully and personally involve each employee in the quest for VPP certification."

During the next several weeks, Dominguez will present specific ways by which each employee can assist the Center in achieving this worthwhile goal. The key to success rests squarely with everyone at this Center. ♦



Glenn technology garners Space Act awards

Three Glenn-developed technologies were recently selected for Space Act Awards. Each honoree received a signed certificate from the NASA Administrator and a proportionate share of the \$144,500 awarded to Glenn for FY02. The awards cover four areas, which include software release, publication and NASA Tech Briefs, Patent applications, and Board Action awards.

Hydroformed Ion Optics and Spall-Resistant Woven Screen Surfaces for Ion Thrusters technology developed by Bruce Banks, chief of the Electro-Physics Branch, prevents the formation of large flakes of metal generated by internal parts that could inhibit high-performance operation or shorten the life of a thruster.

A team from Glenn's Microgravity Environment and Telescience Branch developed the Microgravity Analysis Software System (MASS), which assures accurate and timely measurement of vibrations that might affect or threaten the outcome of microgravity research conducted on the space station. MASS was the

runnerup for NASA Software of the Year. MASS team members include Kevin McPherson and Dr. Ted Wright (NASA), and Ken Hrovat, Eric Kelly, Gene Liberman, Nissim Lugasy, and Tim Reckart (ZINT).

Rafat Ansari, Microgravity Fluid Physics Branch, was recognized for his non-invasive diagnostic tool that can detect early changes in the eye associated with infection, allergic reactions, autoimmune diseases, glaucoma, cataracts, age-related macular degeneration, and diabetic retinopathy.

More information on NASA's Space Act Award Program is available at <http://icb.nasa.gov>. ♦

MASS team members standing, left to right: Eric Kelly, Kevin McPherson, Gene Liberman, Ken Hrovat, and Nissim Lugasy. Sitting, left to right: Ted Wright and Tim Reckart.



Dr. Ansari



Banks

Photo by Quentin Schwinn



Plum Brook alumni gather

BY S. JENISE VERIS

They came—they saw—and bolstered by a brief presentation from Robert Kozar, chief of the Plum Brook Management Office, Plum Brook alumni were assured that the reputation they helped establish 40 years ago—a high caliber of expertise performing tests in world-class facilities—is still being upheld by today's generation.

About 250 guests, including 170 alumni, attended the third Plum Brook Station Reunion, which was postponed for a year due to restricted access to Plum Brook after the tragedy of September 11. The honored guest was David Silverstein, son of Dr. Abe Silverstein considered the visionary for the construction of Plum Brook. Other notables in attendance included Harold Friedman, Jim Blue, and H. Brock Barkley.

Following a brief presentation and luncheon in the Administration Engineering Building, alumni were encouraged to mingle and leisurely visit several areas throughout the building where activities were set up for their enjoyment. An Exchange Store was set up to give alumni the opportunity to purchase NASA-related gifts. In a separate room, alumni were encouraged to view test facility artifacts and help identify personnel and/or activities related to the Reactor Facility in photographs for Glenn archives.

"The current historic preservation effort on Plum Brook Station, centered on the reactor and led by Glenn History Officer Kevin Coleman, contributed significantly to the reunion," said William Brown, committee chairman. "The team from InDyne, Inc., contracted for the project, conducted about 50 interviews during the reunion and into the following week."

Three of the four major facilities were also available for self-tours including the Space Power Facility, Spacecraft Propulsion Facility, and the Hypersonic Tunnel Facility.

Compliments for a job well done were voiced throughout the day to committee members Earl Boitel, Tom Brink, William Brown, Jack Crooks, Ruth Hasse, Jim Hurst, Jim Martz, Harry McCune, Bill Pack, Bob Puzak, Dick Schuh, Starr Truscott, and Dave and Betty Willinger. The committee was encouraged to begin plans for a fourth reunion in 2006. ♦



Photos by Marvin Smith



Plum Brook tests concept for pollution-free electricity

Glenn's Hypersonic Tunnel Facility (HTF), located at Plum Brook Station, recently completed initial testing of a novel combustion concept that could lead to a method for generating pollution-free electricity.

The power generation concept uses diluted oxygen-methane fuel combustion to produce a mixture of steam and CO₂ that can be used to drive multiple stages of steam turbines. Upon exiting the final turbine stage, the steam is condensed to liquid water, leaving a nearly pure stream of CO₂, which can be captured for commercial applications. The testing at Plum Brook involved the demonstration of a full-scale version of a component called the "reheat" combustor. Its purpose is

to boost the temperature of steam between turbine stages to increase system efficiency.

Project Manager Mark Woike explained that the testing is being conducted under an Interagency Agreement with the Department of Energy (DOE), which is partnering with Clean Energy Systems, Inc., Sacramento, CA. The tests require a costly oxygen infrastructure not available at any of the DOE test sites, but in place at Plum Brook.

"We completed the first phase of testing in August," Woike said. "The test rig is currently being reconfigured for additional testing before the end of the year." ♦



C-2002-1692

Photo by Marvin Smith

Project Manager Mark Woike (left) briefs Director of Engineering and Technical Services Randall Furnas on the DOE combustion installation in the HTF. The novel combustion concept could lead to a method for generating pollution-free electricity.



Graphic by Terry Condrich

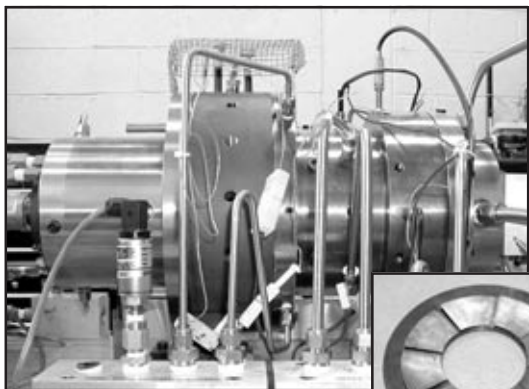
Facility enhances turbomachinery research

With the expanded testing capabilities of the new Thrust Bearing Test Rig in Building 5, Glenn's Oil-Free Turbomachinery Research Team will lead the way toward the development of aircraft turbine engines that do not require an oil lubrication system.

NASA is partnering with industry to demonstrate oil-free turbomachinery technology in a small business jet engine, the EJ-22, which Williams International produced and developed under NASA's General Aviation Propulsion Program. The concept combines the most advanced foil (air) bearings from industry with NASA-developed high-temperature solid lubricant technology to eliminate the need for an oil-lubrication system in high-temperature, high-speed rotating machinery. Eliminating the oil system in this engine will make it simpler, lighter, more reliable, and less costly to purchase and maintain.

"Propulsion gas turbines will place high demands on the foil bearings, especially the thrust bearings," explained Dr. Christopher Dellacorte, technical lead for the Oil-Free Turbomachinery Program in the Tribology and Surface Science Branch. "Up until now, the oil-free team only had the ability to test radial, journal bearings that only support radial shaft loads. This new rig allows us to specifically test oil-free thrust bearings that currently lag in development behind the radial bearings, and are vital for the design of the oil-free turbine engine."

This unique test facility was designed and manufactured by Mohawk Innovative Technology of Albany, NY, under a Small Business Innovative Research Phase III contract. It is capable of testing thrust foil bearings to 80,000 rpm under loads as high as 3500 N (700 lb) and at temperatures to 650 °C (1200 °F). This rig also allows NASA scientists and engineers to develop and test solid lubricants that are applied to the bearing foils or runner and can enhance bearing performance and life. To find out more about this research, visit the Web site at <http://www.grc.nasa.gov/WWW/Oilfree>. ♦



Pictured is the Thrust Bearing Test Rig with a thrust bearing at bottom right.

Committee chartered to recognize veterans

BY DOREEN B. ZUDELL

In 1921, an American soldier—his name known only to God—was buried on a Virginia hillside overlooking the Potomac River and the city of Washington. The Arlington National Cemetery burial site of this unknown World War I soldier became the personification of dignity and reverence for America's veterans and a gathering place for recognition and memorial observances.

The tradition of acknowledging the sacrifices of men and women who served in the armed forces gained added importance at Glenn when Center Director Donald Campbell signed a document to charter the Veterans Awareness Committee (VAC) in July 2002.

Comprising nine (civil servant and support service contractor) employees, the VAC develops and coordinates activities held at the Center in support and recognition of local and national veteran observances. The committee also supports other Federal agencies and participates in appropriate observances in the local community.

"The VAC evolved through the efforts of a handful of employees who organized the Center's parade and other activities to welcome home employees who served in Desert Storm in 1991," explained VAC Chairperson Jim Giomini, Research and Technology Directorate. "Over the past 10 years, the core group continued to host Center events to honor veterans."

The Prisoner of War/Missing in Action (POW/MIA) Recognition Ceremony, established in 1999, is a prime example of a significant observance that continues today under the VAC. To highlight the first event, Chapter 1 and 6 members of Rolling Thunder, an organization of veterans and non-veterans whose goal is a full and fair accounting of those unaccounted for, donated a POW/MIA flag to the Center.

"Last year we invited several guests and speakers from outside of the Center to help us recognize POW/MIA day, but restrictions on visitors after September 11, 2001, redirected our efforts to

include more participation from employees," explained VAC member Linda McMillen, Information Management Systems (formerly Computer Services Division).

That ceremony, perhaps the most poignant one to date, included Color Guard, singers, musicians, and speakers, all from Glenn's rank and file.

Last year also marked the first time that kindergartners from the onsite day care center, Lewis Little Folks, participated in the Veterans' Recognition Day Ceremony.

"Having the Lewis Little Folks students join us changed the complexion of our observances," Giomini affirmed. "It made us realize that the future is not ours to give, but rather it is loaned to us by our children for nurturing and protection."

As the years go by and the children and grandchildren of Glenn veterans (about 15 percent of the civil servant workforce) enter the military, VAC events will continue to hold special relevance at Glenn. About half of the VAC members have children who are serving or preparing to serve in the armed forces.

This year at the September 20 POW/MIA Recognition Ceremony four-year-old Andrea and Jessica, twin daughters of VAC member Rhonda Billick (IDI), Office of Human Resources and Workforce Planning, carried the POW/MIA flag.

With an official charter, the committee is dedicated to continuing the tradition of acknowledging the contributions of fellow Americans, including those at Glenn, who served to ensure the peace and freedom of this country.

VAC member Claudette Wlasuk, Office of Human Resources and Workforce Planning, added, "When we see the participation and heartfelt response of employees who attend the veteran observances, we are rejuvenated in our belief that we would not be here if it were not for those who serve." ♦



**2002
Veterans' Day Observance
Thursday, November 14
1 to 2 p.m., Ad. Bldg.
Auditorium**

Sports Roundup

League names tournament champs

Glenn's NASA Softball League recently ended another exciting season.

The Sidewinders are the 2002 "A" Division Post Season Tournament champions, defeating the Aces in two highly competitive games. The Sidewinders are also the 2002 "A" Division Regular Season champions with a 19-win and 1-loss record. In the past 3 out of 4 years, the Sidewinders have won the "A" Division



The Blasters. Standing, left to right: Bob Hawersaat, Tim Schifle, Matt Kennedy, Todd Zak, Peter Struk, and Amy Young. Kneeling, left to right: Bob Purgason, Ricky Rodriguez (coach), and Charles Maynard. Not pictured: Dan Watson, Dan Bell, Drew Schifle, Dave Chernitsky, and Dave Noren.

Regular Season and the Post Season Tournament, with an overall regular season record of 70 wins and 7 losses.

The Blasters are the "B" Division Post Season Tournament champions, defeating Froggy's, the "B" Division Regular Season champions, by a score of 12-9.

The Sidewinders. Standing, left to right: Lenny Bellisario, Dave Gantose, John Thomas, Jack Kowalewski, Mark Lasky, and Bill Hockman. Kneeling, left to right: Paul Rickey, Barry Piendl, John Lucero, and Dale Martin. Not pictured: Scott Panko, Dean Kocan, Andy Kiel, Alex Oppenheim, Andy Provenza, and Bob Mraz.



The Blasters were this year's Cinderella story after placing last in their division in the 2001 season. They were the fourth seed in this year's tournament. After losing their first game in the double elimination tournament, they had to win 6 games in a row to win the championship.

The NASA Softball League was founded in the mid 1950s, and at its high point in the late 1980s there were 26 teams that played in the league. With 11 teams this season, the league is hoping to add more male and female players in the 2003 season. Games are played Monday through Friday on two softball fields in the West Area starting at 5:15 p.m. with a second set of games usually starting at 6:30 p.m. For more information about the NASA Softball League, contact Kevin Radil (0300) at 216-433-5047 or John Zuzek (6140) at 216-433-3469. ♦

In Memory

Robert Bowman, 67, who retired from Glenn in 1996 with 35 years of service, recently died. He was an engineer and served as chief of the Space Flight Operations Branch.

Helen Hauck, 91, who tracked down scientific data for scientists in 1954 until she became the science and technology chief of the Cleveland Public Library in 1960, recently died.

Carl Liebert, 76, who retired from Glenn in 1997, recently died. An electronics engineer, Liebert held patents for inventing thermal barrier coatings, which are used to protect space shuttle engine parts from corrosion and temperature changes, and gauges that measure heat flux. Liebert was the recipient of a Manned Space Flight Awareness award and I-R 100 award.

Josie Sweisthall, 91, who retired from Glenn in 1974 with 16 years of service, recently died. Sweisthall was an office machine operator in the Mechanical Engineering Division.

In Appreciation

We would like to thank employees from around the Center who provided assistance for the National POW/MIA Recognition observance on September 20, 2002.

—Veterans Awareness Committee

Many, many thanks to all of you for making my recent retirement from Glenn as exciting as my starting there was 37 years ago. I had a wonderful career, and I will miss you very much. I wish each of you good health and a wonderful future.

—Leroy McCreary

DEADLINES: News items and brief announcements for publication in the December issue must be received by noon, Thursday, November 7. The deadline for the January issue is noon, Wednesday, December 11. Submit contributions to the editor via e-mail at doreen.zudell@grc.nasa.gov, fax 216-433-8143, phone 216-433-5317 or 216-433-2888, or send to Ideas for news stories are welcome and will be published as space allows.

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People

Technical achievers



Charleston



Dr. Okojie

Jo Ann Charleston, Office of Educational Programs, received the Education Technology Think Tank Technology Champion award in recognition of vision, planning, and implementation of science, mathematics, and engineering programs for minority youth. Charleston also received the 2002 National Technical Association (NTA) Technical Achiever award in the Educational category.

Dr. Robert Okojie, Sensors and Electronics Technology Branch, received the NTA Technical Achiever award in the Scientific category for his exceptional accomplishments in advancing the state of the art of microelectromechanical systems.

Gail Wright, GLTC, received the NTA Technical Achiever award in the category of Technical Entrepreneur. Wright heads up the Garrett Morgan Commercialization Initiative.



Wright

Commendation

Dean Bitler, Commercial Technology Office, received a letter of appreciation and a medal by the Korean Government for his sacrifice and service. He and other Korean War veterans were presented the formal commendation during a ceremony at the Lakewood Civic Auditorium on September 28.



Bitler

Retirements

Karen Arcuri retired from the Office of Human Resources and Workforce Planning on November 3, 2002, with 12 years of NASA service.

William Jones retired from the Structures and Acoustics Division on September 21, 2002, with 37 years of NASA service.

John Johnson retired from the Test Installations Division on September 27, 2002, with 21 years of NASA service.

Hugh Pierce, Jr., retired from the Office of Human Resources and Workforce Planning on November 2, 2002, with 12 years of NASA service.

Frederick Rakes retired from the Test Installations Division on July 13, 2002, with 25 years of NASA service.

Michael Seaver retired from the Facilities Test Engineering Division on October 3, 2002, with 39 years of NASA service.



Jones



Seaver

Behind the Badge

a closer look at our colleagues

Luis Beltran



Job Assignment: I work with the Facilities Management Office as a facility manager providing testing services supporting aircraft engine research in acoustics and combustion.

Time at Glenn: I completed 17 years in June 2002.

Hometown: I was born in the Bronx, NY, and currently reside in

Describe your family: I'm blessed with a wonderful family—my wife Ana, my daughter, Elisa, and my son, Daniel. Ana and I met in 1985, shortly after I arrived in the Cleveland area. We got married in 1987. Ana is a wonderful wife and companion, and I praise God for bringing her into my life. Elisa, 13, is in eighth grade and Daniel, 10, is in the fifth grade. Our children are treasures from God. They keep Ana and me very busy as most children do, and we're grateful for the family times we can share together.

Career alternative: My dream was always to be a military aircraft pilot.

Favorite music: I love easy listening Spanish music; the Spanish language is both powerful and very poetic in music.

Favorite book or magazine: My favorite book is the *Bible*, God's living and precious Word to us. Napoleon said, "The *Bible* is no mere book, but a living creature, with a power that conquers all that oppose it."

Favorite movie or play: One of my favorite movies is still *Raiders of the Lost Ark* and other Indiana Jones movies.

Person you most admire: I was fortunate to be raised by my grandmother, Angelina Maldonado Soto, in Puerto Rico from the age of 2 to 6. Even though she has moved on to a much better place, her impact in my life is everlasting. She was like an angel, as her name implies. She was always loving, caring, and humble, providing faith and strength for our family when things seemed hopeless. Abraham Lincoln said, "Everything I am or hope to be, I owe to my angel mother." I would slightly modify that to say my angel grandmother.

Native American Indian Heritage Month

Employees raise cultural awareness

BY DOREEN B. ZUDELL

While few of us will ever know what it truly means to be an American Indian, becoming aware of the history, customs, and challenges of indigenous people are key to breaking down barriers and building respect.

Avis Hudson, a member of Glenn's Office of Equal Opportunity Programs (OEOP) and Native American Program manager, explained that many Americans stereotype indigenous people, not realizing that each tribe has its own language, customs, and structure.

"What's important to know is that indigenous people share the same traditions in respect to spirituality. This is demonstrated through respect of elders and children, symbolism in ceremonies and celebrations (which today are commonly referred to as powwows), and caring for the Earth," explained Hudson, a member of the Dakota Sioux and Navajo tribes.

To eliminate stereotypes and address the concerns of American Indians, Hudson and others at Glenn work through avenues such as the American Indian

Science and Engineering Society, NASA Headquarter's Native American Program, and Glenn's Native American Advisory Council (NAAC).

NAAC member Dr. Kelly Carney, Structural Mechanics and Dynamics Branch—an avid student and reader of nonfiction books on the Native American culture for many years—has come to know and respect these cultures.

"Ohio was the scene of one of the longest and largest Indian wars, which lasted almost continuously between the Revolutionary War and the War of 1812," said Carney. "After the Indians' defeat, most of the Ohio-area tribes were moved to west of the Mississippi, and so Indian presence was almost absent until the relocation program in the 1950s."

The relocation program, an effort by the Federal Government to assimilate Native Americans into mainstream culture by moving them from their reservations to the cities, was often a difficult and unfruitful experience for the tribes.

NAAC believes it can play a role in rectifying injustices of the past by providing



Dr. Kelly Carney (left) and Avis Hudson work to raise cultural awareness.

opportunities for indigenous people to excel and fulfill their potential. Toward this goal, the NAAC is undertaking an education initiative to break down barriers on a local level. It is their hope that through this initiative NAAC will attract Native Americans to the fields of science and engineering.

"NAAC and Glenn's OEOP will continue to work to eliminate the misconceptions that Native Americans aren't around any more and that enough has been done to help them," Hudson affirmed. "A more basic necessity facing American Indians today is perhaps best expressed in Chief Sitting Bull's wise words, 'Let's put our heads together to think of the future of our children.'" ♦

National Aeronautics and
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